

50p

THE Unexplained

MYSTERIES OF MIND SPACE & TIME

The elusive planet

Psychic art on show

Investigating D. D. Home

Whatever happened to dragons?

Mystery tape recordings

Fairies on film

20



THE Unexplained

MYSTERIES OF MIND SPACE & TIME

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In next week's issue

Theories about a supposed new planet closer to the Sun than Mercury are examined in the last part of our series on **Vulcan**. Strange prophecies in a humanoid encounter from the USA feature in **UFO casebook**, while a bizarre tale about writings from beyond the grave is related in **Psychic art**. This is followed by a final look at **Dragons** and their legendary connection with the Earth spirit and ley lines. More fairy photographs – Sir Arthur Conan Doyle, creator of Sherlock Holmes, was one of the first champions of their authenticity – can be seen in the series **Cottingley fairies**, and we end with the **Electronic voice phenomena**, in which we investigate how voices from the dead are mysteriously captured on tape.

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The case of the Cottingley fairies

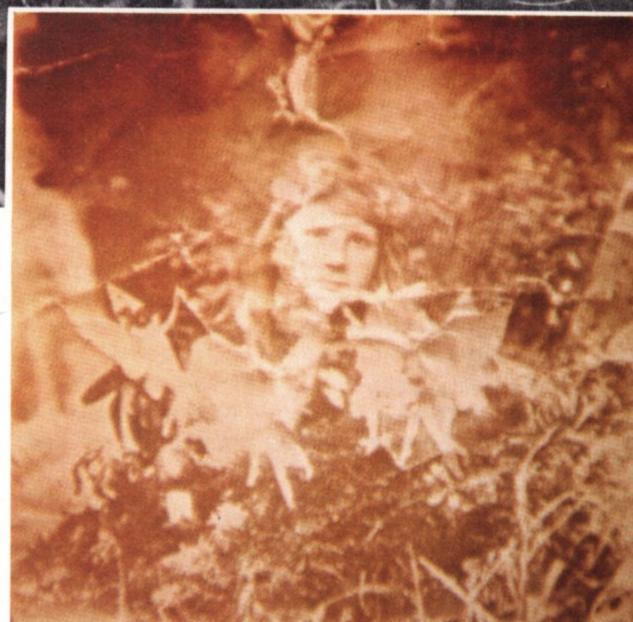
All of us, when we were children, believed in fairies. Here, JOE COOPER tells the extraordinary story of two little girls who not only believed in fairies, but made friends with them – and even captured them on film

IN THE WEEK BEFORE the end of the First World War, 11-year-old Frances Griffiths sent a letter to a friend in South Africa, where she had lived most of her life. Dated 9 November 1918, it ran:

Dear Joe [Johanna],

I hope you are quite well. I wrote a letter before, only I lost it or it got mislaid. Do you play with Elsie and Nora Biddles? I am learning French, Geometry, Cookery and Algebra at school now. Dad came home from France the other week after being there ten months, and we all think the war will be over in a few days. We are going to get our flags to hang upstairs in our bedroom. I am sending two photos, both of me, one of me in a bathing costume in our back yard, Uncle Arthur took that, while the other is me with some fairies up the beck, Elsie took that one. Rosebud is as

Above: a sharpened version of the first photograph (right), which shows Frances Griffiths behind a group of dancing fairies. Photographic experts examined the negative and the print but could find no trace of trickery



fat as ever and I have made her some new clothes. How are Teddy and dolly? An ordinary and matter-of-fact letter from a schoolgirl to her friend, one might say, apart from the rather startling reference to fairies. But, as both Frances and her cousin Elsie Wright have since pointed out (they are now grandmothers), they were not particularly surprised by seeing fairies; they seemed a natural part of the rural countryside around the 'beck' (stream) at the bottom of the long garden in Cottingley, near Bradford, in West Yorkshire.

The photograph enclosed by Frances – the famous one, which has since been reproduced thousands of times around the world, albeit in an improved and sharpened version – showed a little girl staring firmly at a camera, since fairies were frequently to be seen, but she herself was photographed not so often! On the back of the snap was

Cottingley fairies

scrawled in untidy schoolgirl writing:

Elsie and I are very friendly with the beck Fairies. It is funny I never used to see them in Africa. It must be too hot for them there.

Elsie had borrowed her father's camera – a Midg quarter-plate – one Saturday afternoon in July 1917 in order to take Frances's photo and cheer her up (for her cousin had fallen in the beck and been scolded for wetting her clothes). They were away for about half an hour and Mr Wright developed the plate later in the afternoon. He was surprised to see strange white shapes coming up, imagining them to be first birds and then sandwich papers left lying around; in vain Elsie behind him in the dark-room said they were fairies.

In August it was Frances who had the camera, when she and Elsie scaled the sides of the beck and went up to the old oaks. There she took a photograph of Elsie with a gnome. The print was under-exposed and unclear, as might be expected when taken by a young lady rising 10 years old. The plate was again developed by Elsie's father, Arthur, who suspected that the girls had been playing tricks and refused to lend his camera to them any more.

Parents turn sleuth

Both Arthur and his wife, Polly, searched the girls' bedroom and waste-paper basket for any scraps of pictures or cut-outs, and also went down to the beck in search of evidence of fakery. They found nothing, and the girls stuck to their story – that they had seen fairies and photographed them. Prints of the pictures were circulated among friends and neighbours, but then interest in the odd affair gradually petered out.

The matter first became public in the summer of 1919 when Polly Wright went to a meeting at the Theosophical Society in Bradford. She was interested in the occult, having had some experiences of astral projection and memories of past lives herself. The lecture that night was on 'fairy life', and Polly mentioned to the person sitting next to her that fairy prints had been taken by her daughter and niece. The result of this conversation was that two 'rough prints' (as they were later called) came to the notice of Theosophists at the Harrogate conference in the autumn, and thence to a leading Theosophist, Edward Gardner, by early 1920.

Mr Gardner was a precise, particular man. Even a look at his photograph conveys this precision, which is also suggested by the neat copies he kept of his letters. Gardner's immediate impulse after seeing the fairy pictures was to clarify the prints and, in a letter to a photographic expert, Fred Barlow, he describes the instructions he gave to his assistants:

Then I told them to make new negatives (from the positives of the originals) and do the very best with them



Above: Sir Arthur Conan Doyle, who used sharpened prints of the first two Cottingley photographs to illustrate his article on fairies, which was published in the Christmas 1920 issue of the *Strand Magazine*

short of altering anything mechanically. The result was that they turned out two first class negatives which . . . are the same in every respect as the originals except that they are sharp cut and clear and far finer for printing purposes . . .

It seems incredible to us today that he could be so naive, not anticipating the inevitable questions from critics as to shutter speed, figure definition, the suspicious resemblance of the fairies' clothes and hairstyles to the latest fashions . . . But Gardner only wanted the clearest pictures – as a Theosophist he had been studying fairy lore for years and had heard many accounts of fairy sightings, so the possible reactions of sceptics never entered his head.

By a striking coincidence, Sir Arthur Conan Doyle (creator of Sherlock Holmes and fanatical Spiritualist) had been commissioned by the *Strand Magazine* to write



Above: Elsie Wright and her cousin Frances (above right). The girls were close companions and spent hours playing together near the beck where the fairy photographs were taken



Below: Polly Wright, Elsie's mother, began to take the photographs seriously after she had attended a Theosophical Society lecture on 'fairy life'



an article on fairies for their Christmas issue, to be published at the end of November 1920. He was preparing this in June when he heard of the two fairy prints in circulation and eventually made contact with Gardner and borrowed copies.

From the beginning, contrary to the impression the public later gained of him, Conan Doyle was on his guard. He showed the prints to Sir Oliver Lodge, a pioneer psychical researcher, who thought them fakes – perhaps involving a troupe of dancers masquerading as fairies. One fairy authority told him that the hairstyles of the sprites were too 'Parisienne' for his liking. Lodge also passed them on to a clairvoyant for psychometric impressions – Gardner's photoprinter, Mr Snelling (who had prepared the second batch of prints from the originals) was described accurately.

What seems rather mysterious to us today is that no one was over-anxious to examine the original photographs, but seemed content to analyse prints. Snelling (of whom it had been said 'What Snelling doesn't know about faked photography isn't worth knowing') said in his first report to Gardner on the



Above: a sharpened print of 'Elsie and the gnome', the second fairy photograph, which was taken by Frances in August 1917. The original was examined by experts in the same way as the first – again no evidence of fakery could be found

Below: Arthur Wright, Elsie's father, whose camera – a Midg quarter-plate – was used to take the photographs



'rough' print that he could detect movement in all the fairy figures. Kodak, by contrast, stated that an experienced photographer may have been involved – which suggests that the prints that they had been examining may have been sharpened ones.

A possible explanation is that Conan Doyle and Gardner may have wished to avoid any mention of improving the originals at that stage; perhaps they did not consider the matter important. What was vital to them was the propagation of Theosophical and Spiritualist doctrines. As far as they were concerned, clear prints showing recognisable fairies and a gnome would provide the long-sought firm evidence for 'dwellers at the border' (as Conan Doyle was later to term nature spirits).

Conan Doyle despatched his 'Watson' – in this real-life case, Gardner – to Cottingley in July. Gardner reported that the whole Wright family seemed honest and totally respectable. Conan Doyle and Gardner decided that if further fairy photographs were taken then the matter would be put firmly beyond question. Gardner journeyed north in August with cameras and 20 photographic

plates to leave with Elsie and Frances hoping to persuade them to take more photographs. Only in this way, he felt, could it be proved that the fairies were genuine.

Meanwhile, the *Strand* article was completed, featuring the two sharpened prints, and Conan Doyle sailed for Australia and a lecture tour to spread the gospel of Spiritualism. He left his colleagues to face the public reactions to the fairy business.

Newspaper sensation

That issue of the *Strand* sold out within days of publication at the end of November. Reaction was vigorous – especially from critics. The leading voice among them was that of one Major Hall-Edwards, a radium expert. He declared:

On the evidence I have no hesitation in saying that these photographs could have been 'faked'. I criticise the attitude of those who declared there is something supernatural in the circumstances attending to the taking of these pictures because, as a medical man, I believe that the inculcation of such absurd ideas into the minds of children will result in later life in manifestations and nervous disorder and mental disturbances . . .

Newspaper comments were varied. On 5 January 1921 *Truth* declared: 'For the true explanation of these fairy photographs what is wanted is not a knowledge of occult phenomena but a knowledge of children.' On the other hand the *South Wales Argus* of 27 November 1920 took a more whimsical and tolerant view: 'The day we kill our Santa Claus with our statistics we shall have plunged a glorious world into deepest darkness'. The Day's Thought underneath was a Welsh proverb: 'Tis true as the fairy tales told in books.' *City News*, on 29 January, said straightforwardly: 'It seems at this point that we must either believe in the almost incredible mystery of the fairy or in the almost incredible wonders of faked photographs.'

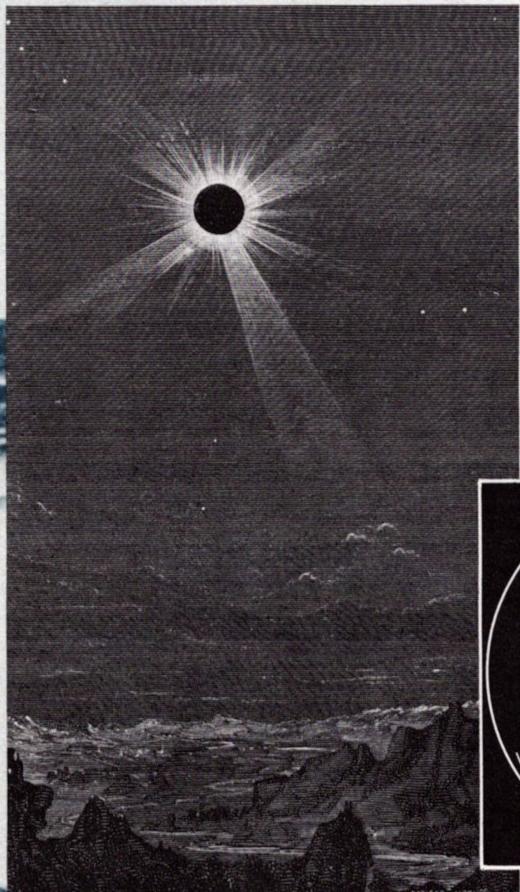
The *Westminster Gazette* broke the aliases used by Conan Doyle to protect Frances and Elsie – and a reporter went north. However, nothing sensational, or even new, was added to the story by his investigation. He found out that Elsie had borrowed her father's camera to take the first picture, and that Frances had taken a picture of Elsie and a gnome. In fact there was nothing he could add to the facts listed by Conan Doyle in his article 'Fairies photographed – an epoch-making event'. The reporter considered Polly and Arthur Wright to be honest enough folk – and he returned a verdict of 'unexplained' to his paper in London.

The case might well have faded away with the coming of spring in 1921, had not the unexpected happened: Elsie and Frances took three more fairy photographs.

What did the cousins' new fairy photographs show? See page 414

The elusive planet Vulcan

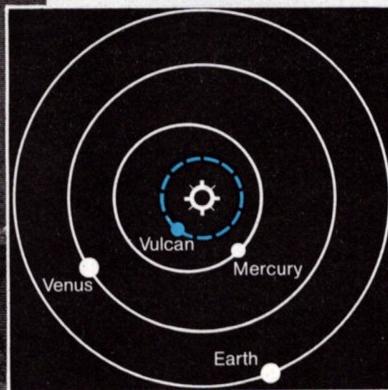
Why does the planet Mercury have an irregular orbit? Towards the end of the 19th century, as NIGEL HENBEST reveals, astronomers thought they had found the cause: there was another planet, Vulcan, even nearer the Sun



Left: the total eclipse of the Sun on 29 July 1878, as seen from the Rocky Mountains, USA. One of the bright objects near the Sun was identified as the planet Vulcan

Below: the position of Vulcan as calculated by 19th-century astronomers

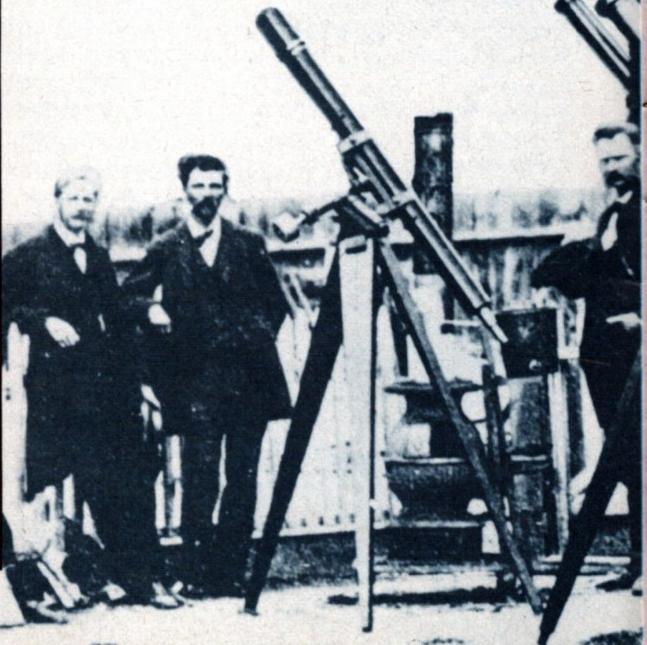
Bottom: *Vulcan's forge*, by Velázquez. The planet Vulcan was named after the Roman fire-god (centre left)



PEERING THROUGH HIS TELESCOPE on 26 March 1859, a French amateur astronomer was startled by a strange event on the Sun. As he watched, a black speck moved slowly across the glowing solar disc until it finally disappeared off at one edge. The astronomer, a Dr Lescarbault, surmised at once that he had discovered a previously unknown planet – and his theory came to be supported by the best minds of the age.

The black spot that Lescarbault saw was moving too quickly to be a sunspot carried by the Sun's rotation. It must be the silhouette of a planet travelling between the Sun and the Earth. And this planet was neither Mercury nor Venus, the only known planets closer to the Sun than us. Its speed across the Sun's disc was faster than that of Mercury and showed it to be in a smaller orbit. Closer to the Sun than even Mercury, Lescarbault's newly found world must be extremely hot, baked in the Sun's glare: it was named Vulcan, after the Roman god of fire.

The discovery was not totally unexpected, however. The greatest French astronomer of the time, Urbain Leverrier (1811–77), had suspected its existence 20 years earlier, for purely theoretical reasons. He had been studying the effects that the gravitational pull of each planet has on the orbits of the others about the Sun. Starting with the innermost planets, he found a puzzling discrepancy for Mercury: like those of all other planets, its orbit is oval, roughly speaking – but in the case of Mercury, the long axis of the oval gradually swings around the Sun as the other planets tug on it; that is, the *orbit itself* moves. But when Leverrier computed what the motion of the long axis of Mercury's orbit *should* be, it turned out to be slightly less than the actual motion. Leverrier concluded that either the mass of Venus was not



known correctly, so he had miscalculated its gravitational pull on Mercury – or that there was another unknown planet contributing to the pull.

There he left Mercury, and turned to investigate similar oddities in the orbit of Uranus – most distant planet then known – and his calculation led to the discovery of Neptune, the planet that was indeed causing the perturbation in Uranus's orbit.

Leverrier visited Lescarbault to check the reliability of his sighting – for Lescarbault was a doctor by profession, not an astronomer, and his amateur's telescopes were of very poor quality. The visit must rank as unique in the history of science. The greatest astronomer in the country disguised himself to pay a visit to a humble amateur – only when Leverrier was convinced of Lescarbault's reliability did he reveal his identity!

From Lescarbault's observation, Leverrier calculated that Vulcan lies 13,082,000 miles (21,053,000 kilometres) from the Sun – about one third of Mercury's distance from the Sun, and one seventh of Earth's. It takes 19 days 17 hours to complete one orbit.

Vulcan's path, like Mercury's, is tilted, so it does not cross the Sun's face as seen from Earth in every orbit, and Leverrier predicted that the next such transit would occur in March or April 1860. Astronomers watched avidly throughout those two months, but nothing was seen. Leverrier concluded that the transit must have occurred at night, while the Sun was not visible.

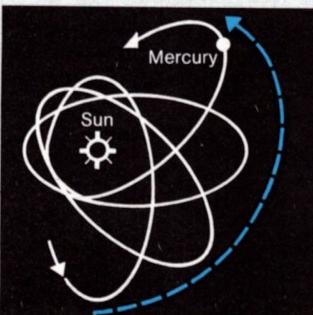
In March 1862, Vulcan was rediscovered. An English amateur astronomer, a Mr Lummis of Manchester, saw a black spot crossing the Sun's face. Using this in conjunction with Lescarbault's sighting should have given a more accurate orbit for the planet, and the French astronomers Radau and Valz recalculated Vulcan's orbit. Radau's result was a radius of 13,174,000



Above: Urbain Leverrier, the astronomer who predicted the existence of Vulcan

Below: Mercury's orbit around the Sun. The orbit itself shifts in the direction shown by the blue arrow

Bottom: Observers of the solar eclipse of 29 July 1878. Professor James C. Watson (standing to the left of the two women) observed a point source of light close to the Sun – and identified it as Vulcan. *Warning: Do not look directly at the Sun yourself. Serious damage to the eyes can result*



miles (21,201,000 kilometres), and an orbital period of 19 days 22 hours – very similar to Leverrier's original computation. Valz, oddly enough, found a rather smaller orbit of 12,076,000 miles (19,434,000 kilometres), and a period of only 17 days 13 hours.

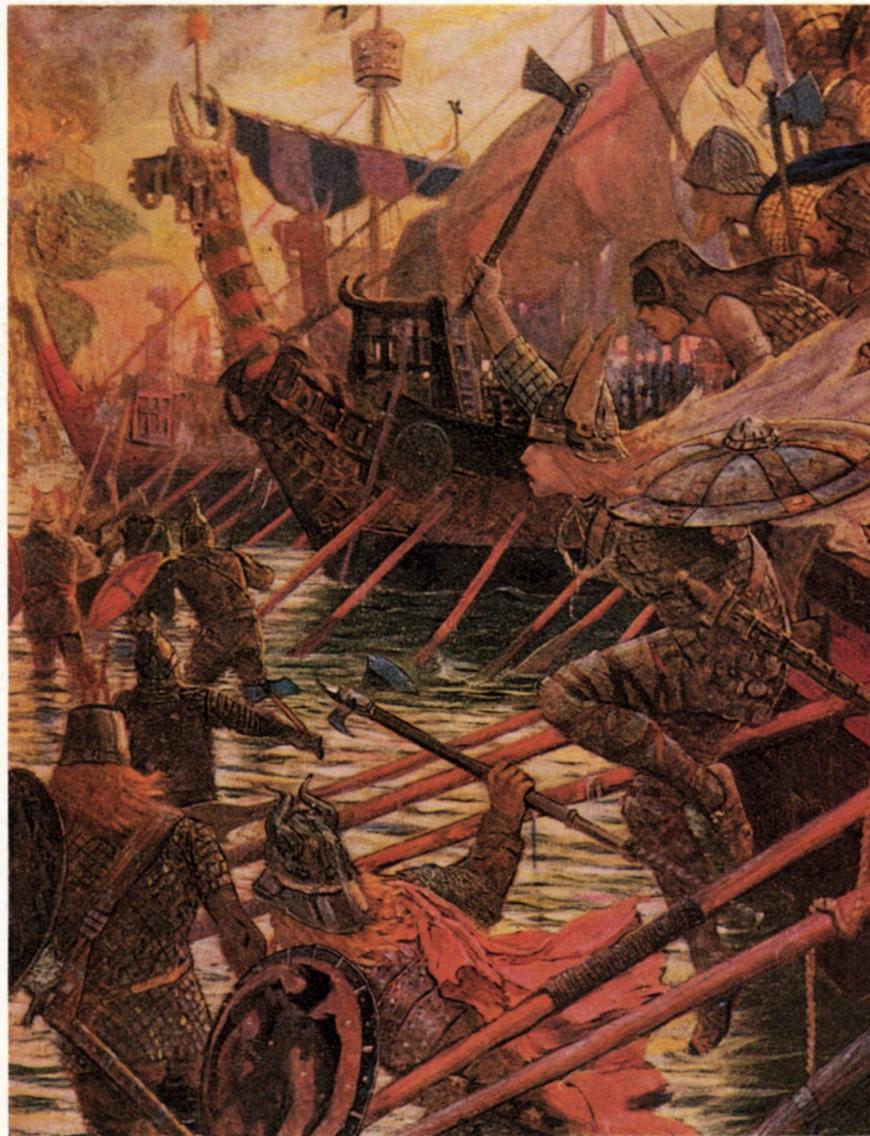
The best way of observing Vulcan, and sorting out these discrepancies, was not to wait for its unpredictable transits across the Sun. During a total eclipse, the Sun's face is blocked off by the Moon, and its brilliance is so reduced that the sky goes dark. Stars lying near the Sun then become visible, as do the planets Mercury and Venus. During an eclipse, if the theories are correct, Vulcan should be seen as a bright point even closer to the Sun than Mercury and Venus.

The total eclipse of 29 July 1878 was visible from the United States, and two experienced astronomers did indeed see an unexpected 'star' near the Sun. Professor James C. Watson, director of the Ann Arbor Observatory, saw a star $2\frac{1}{2}$ ° south-west of the Sun, while Lewis Swift, an experienced amateur who had discovered several comets, noticed two stars some 3° south-west of the Sun. (A degree is defined as twice the diameter of our Sun, as seen from the Earth.) He identified one as the star theta Cancri, the other as Vulcan.

Both astronomers described Vulcan as red in colour. Watson looked at it through a telescope. He saw not just a point of light, which is how a star would have appeared, but a definite disc, resembling the image of a small planet. The case appeared to have been solved. The scorched world of Vulcan seemed about to join the established planets of the solar system: no longer would the list begin 'Mercury, Venus, Earth. . .', but 'Vulcan, Mercury, Venus, Earth. . .'

How did Einstein's discovery of general relativity affect the Vulcan theory? See page 401





Where have all the dragons gone?

What is the origin of the dragon legends that abound throughout the world? Are they simply stories invented by Man to explain events he did not understand – or are they somehow rooted in fact? ANNA PAVORD investigates

'THE DRAGON,' runs an entry in a Natural History published in 1776, is 'a most terrible animal, but most probably not of Nature's formation.' It seems that, in the Age of Reason, it was worth hedging one's bets. Perhaps the writer had in mind the story of the Essex serpent, which had been killed only a hundred years earlier in 1668 at Henham, north of Bishop's Stortford. It is commemorated in a carving at Henham church and in a contemporary pamphlet, now in the British Museum. A woodcut made at the same time shows it as a creature with no legs and a scaly skin with toad-like bumps. It was about 9 feet (3 metres) long and was killed by a band

Above: an artist's impression of a Viking attack on the British. Some people have tried to explain away the prevalence of dragon myths in Britain by interpreting them as stories of the Danish raiders who, in the eighth century, came in sailing ships with high dragon prows to attack the coastal towns and villages of north-eastern Britain. But is there, as others claim, more to the legends?

of villagers, who stabbed it with pitchforks.

Another British Museum document, the Bowes manuscript, describes an encounter with the Sockburn dragon, which terrorised a parish in County Durham in Saxon times:

Sir John Conyers, Kt. slew that monstrous and poisonous vermin, wyvern, asp or werme, wh: had overthrown and devoured many people in fight for that the scent of the poison was so strong that no person might abyde it. And by the Providence of the Almighty God, the said John Conyers, Kt overthrew the sd. monster and slew it. . . .

Rational minds have, of course, explained away the story of the Sockburn dragon. Some say that the word 'dragon' was used as a symbol to describe a flood of the River Tees, which loops in a horseshoe round the village. Others interpret it as a tale of Danish raiders, who invaded many rivers of the north-east coast in boats with high serpent-carved prows.

It is not difficult to explain away dragons, but the fact that several different explanations are offered up for each dragon legend indicates a central weakness in the very process of explaining. The point is that the image of the dragon was so strong that it superseded all other images or words that might have been used in its stead. In the original account of the Sockburn Worm, Sir John did not divert a flood, or fight the Danes, or the devil, or even a giant. He fought a dragon.

A striking but fallacious argument for the physical existence of the dragon is put forward by Peter Dickinson in his book *The flight of dragons* (1979). He puzzled for a long time about the problem of how such a bulky creature could have flown. Even allowing for

weight-saving strategies, he calculated that an average dragon body, based on different descriptions of the beast, must have weighed about 20,000 pounds (9000 kilograms). Giving the dragon a capacity for lift roughly equal to that of the bumblebee, which can lift $2\frac{1}{2}$ pounds of body weight for each square foot (0.17 kilograms per square centimetre) of wing, he arrived at a wing span for his average dragon of over 600 feet (180 metres). Physically this was impossible.

A chance viewing on television of the wreck of the airship *Hindenburg* in 1937 provided the catalyst for a radical reappraisal of the dragon problem. He concluded that dragons could fly because most of their bodies were hollow, and filled with a lighter-than-air gas; they needed an enormous body to hold enough gas to provide lift for the total weight of the beast; they did not need enormous wings, because they used them

only for propulsion and manoeuvring; and they breathed fire because they had to. It was a necessary part of their specialised mode of flight.

Dickinson suggested, in defiance of all chemical possibility, that the inside of the dragon must have been a vast chemical reactor with hydrochloric acid, already present in the digestive systems of all vertebrates, reacting with calcium obtained from the bone structure to form hydrogen, a lighter-than-air gas. The dragon's bone must have been self-renewing, depending on a certain intake of limestone.

This metabolic process could not be completely shut down when the dragon was at rest, so from time to time it would need to vent surplus hydrogen. The safest way to do this would be to burn it off, with an ignition system probably depending on chemical rather than electrical means.

The theory also provides neat explanations for the essential features of dragons – their venomous blood and their predilection for princesses and treasure – and offers a tempting answer to a nagging problem, the absence of any true dragon fossils. 'Flight,' writes Dickinson 'was achieved by a controlled digestion of parts of the bone structure. When the dragon died, the control mechanism ceased to operate and the whole structure corroded.'

This concept of spontaneous liquefaction crops up in a report of an interview in Ireland that took place in July 1968 – years before Dickinson published his theory. F. W. Holiday was questioning a local resident about a dragon, sea monster, or *peiste* that, a generation earlier, had been found in a culvert near Lough Derrylea, Cross, County Clare. 'It couldn't wriggle itself through,' said the



Above: a carving on the porch of the church of St Mary the Virgin, Henham, commemorates the killing of the famous 'Essex serpent' in 1668

man. 'They didn't bother going near it and it stayed and just melted away.'

If one believes that the legend and fantasy surround a kernel of fact, then there is little doubt that the mythical dragon of countless tales is the successor of some real animal.

The pterodactyl has something of the dragon about it; so does the plesiosaur, a sea monster that hunted in our waters 150 million years ago. In the summer of 1980, the most complete skull and jawbones yet found of a plesiosaur were dug out of a claypit in Westbury, Wiltshire. It had about 80 teeth, the biggest 8 inches (20 centimetres) long, and the jaw suggested that the creature must have been 30 feet (9 metres) long.

Perhaps the dragon, having mastered the art of flight, escaped the consequences of the cataclysm that wiped out its saurian relatives. Its extinction (if it is extinct, for there are some who argue for its continued existence) came much later, the consequence of shrinking habitats and the unremitting hostility of its chief enemy, Man.

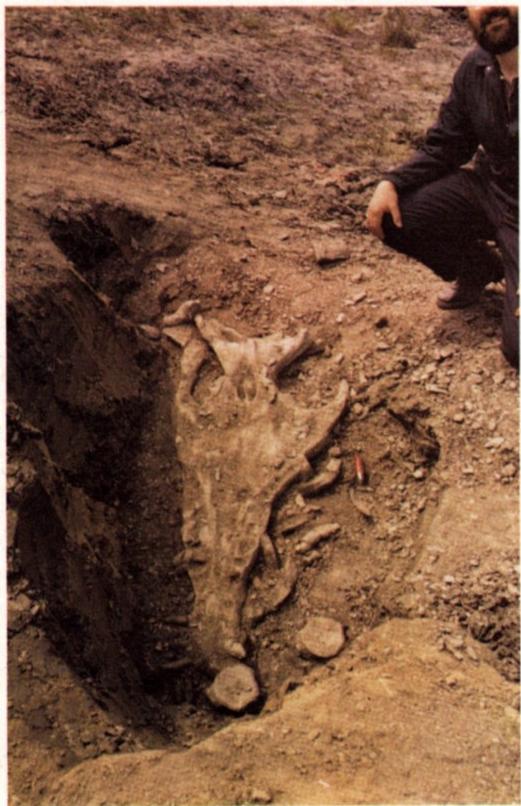
On a slightly different tack, Professor Carl Sagan accounts for the spread and consistency of dragon legends by saying that they represent a kind of fossil memory that has come down to us from the time of the dinosaurs, a general race memory inherited from our ancestors, who had to compete with these giant predators. In *The dragons of Eden* he writes:

The most recent fossil is dated at about sixty million years ago. The family of man (but not the genus *Homo*) is some tens of millions of years old. Could there have been man-like creatures who actually encountered *Tyrannosaurus Rex*? Could there have been dinosaurs that escaped the extinctions in the late Cretaceous period?

Although the idea of an overlap is necessarily speculative, the dragon as an image of some imperfectly remembered but traumatic saurian/simian conflict is a strong one.

The monks who wrote and illustrated the





Left: the jaw of a plesiosaur, a sea monster that has been extinct for 150 million years. This example, the most complete ever found, was dug out of a claypit in Westbury, Wiltshire, in the summer of 1980. The enormous plesiosaur has much about it that is reminiscent of the dragon, and Dr Carl Sagan has conjectured that dragon myths may represent an imperfect race memory of a conflict between humans and monsters of the Jurassic period

Below: a flying lizard, *Draco volans*, from the Indo-Malayan region. This creature can actually fly, or glide, on its webbed wings. But it is difficult to see how the dragon legends could have grown up around it, for it is only about 6 inches (15 centimetres) long



bestiaries, popular and improving tracts of the Middle Ages, interpreted the dragon rather differently. Each creature in the bestiary illustrates some moral lesson. The phoenix is the symbol of resurrection, the panther is Christ, the dragon anti-Christ. In a typical story the panther dines, then sleeps for three days. When it wakes up, it belches and all the other animals follow its sweet breath. But the dragon, the panther's only enemy, hides away in fear of the breath, which can destroy it.

In the *Bestaire de Guillaume le Clerc de Normandie*, made between 1210 and 1211, the dragon fights with the elephant (which represents Adam), striking it with its tail and winding about its legs.

The Roman historian Pliny also commented on the enmity between dragon and elephant in his *Histories*, written in the first century AD:

India bringeth forth the biggest elephants and also the dragons that are continually at variance with them and evermore fighting, and those of such greatness that they can easily clasp and wind them around the elephants and withal tie them fast with a knot.

Pliny was one of the earliest of a long line of writers who believed in the dragon as a zoological actuality.

Edward Topsell, who wrote the *Historie of serpents* (1658), was another believer. His descriptions of dragons are precise and detailed, often accompanied by engravings showing the different types that he defines in the text, the serpent-dragon drawn next to its closest kin, the snake, a reptilian

dragon accompanying a chameleon. 'Indian, Aethiopian and Phrygian dragons have very wide mouths,' he says 'through which they often swallow in whole fowls and beasts.' The Indian dragons he subdivides into two categories, the marsh dragon and the mountain dragon.

Their snouts are very strong, resembling the great ravening fishes; they have beards of yellow-golden colour, being full of bristles: and the Mountain dragons commonly have more deep eye-lids than the Dragon of the Fens. Their aspect is very fierce and grim and whensoever they move upon the earth, their eyes give a sound from their eye-lids, much like unto the tinkling of Brasse, and sometimes they boldly enter into the sea and take Fishes.

Topsell is equally precise about the medicinal properties of the dragon. The fat is a remedy for creeping ulcers, the head is good for curing a squint and the tongue, pickled in wine, will protect against 'Incubi, Succubi, or else Night-mares.'

The early cartographers also acknowledged the dragon's existence: 'It is alle deserte and fulle of Dragouns and grete serpentes.' They may possibly have been using it as a symbol for lands beyond their knowledge, but there is some evidence to suggest that for them the dragon was as real as the exotic giraffes and elephants that they crammed into the spaces between their boldly delineated rivers and their scatterings of castles.

Orthodox zoologists suppose that the existence of the mythical dragon amongst other perfectly credible animals in early maps and histories came about as a result of faulty



Right: St Martha and 'her' dragon, from an Italian woodcut of the 15th century. The biblical St Martha was the sister of Mary Magdalene and Lazarus, but in medieval times she became confused with another Martha, whose name was associated with a mysterious legend. It was said that she had been able to subdue a dragon that was ravaging the countryside near Tarascon in south-east France by sprinkling it with holy water. Tying her girdle around its neck, she led it over 10 miles (16 kilometres) to Arles, where it was killed



interpretation. It was in this way that Marco Polo's description of a Chinese alligator was turned by a contemporary artist into a very dragonish beast. Marco Polo described the alligator as a huge serpent with two short legs near the head, wide jaws and big, sharp teeth. It was the artist who added wings and a tail tipped with a miniature serpent head.

Some large snakes, particularly the boa constrictor or the python, have dragonish qualities. They can grow to 25 feet (7.5 metres) in length, and have the serpentine body of the dragon, though none of its appendages. In 1978, *The Times* carried a report from India about a python that half-swallowed a man. Villagers fought against

Above: an illustration from a medieval account of Marco Polo's travels. The dragon in the middle is based on an accurate description of the Chinese alligator – it is the artist who has added the wings and tipped the tail with a tiny serpent's head

Below: the elephant, representing Adam, fights with the dragon, representing the anti-Christ, in this illustration from a medieval bestiary



the snake and in the battle both python and victim died. Telling the story, the villagers afterwards used the word 'dragon' for the snake.

The flying lizards of the Indo-Malayan region actually bear the zoological name *Draco* and can fly, or rather glide, on webbed wings. The problem is that they are only about 6 inches (15 centimetres) long, and it is difficult to see how anything so small could have inspired the awe and fascination that has kept the dragon legends alive for so long.

A larger lizard, *Varanus komodoensis*, is popularly called the Komodo dragon. It grows up to 12 feet (3.5 metres) in length and looks reasonably dragonish, with a flat, ugly head, forelegs and a long, scaly body. However, it does not fly and its habitat is restricted to some Indonesian islands.

Crocodiles, alligators, snakes and lizards, all have some reptilian features in common with the dragon, but none of them has enough to identify it positively as the source of the legend. One might as well try to prove that a lion is a dog because both are four-legged carnivores. If the dragon existed on this earth, then it seems more likely that it existed as a species in its own right. If it did not exist, then it is possible that it was created by men to explain or rationalise cosmic happenings or earthly forces that were far beyond their understanding or control.

The beneficent dragon of the East has many magical qualities. See page 410

A gallery of psychic art

Does artistic genius die with the artist – or does it survive, to find expression through the hands of living sensitives?
LYNN PICKNETT looks at some extraordinary claims that past masters have produced modern paintings



PABLO PICASSO, who died in April 1973, produced several drawings in both pen-and-ink and colour, three months afterwards. Perhaps it would be more accurate to say that Picasso-style drawings were transmitted through British psychic Matthew Manning, who had been trying to 'get through' to Picasso. While concentrating on him he had found his hand being controlled – apparently by the spirit of Picasso, or whatever signed itself 'Picasso' on the drawing.

Psychic art presents many of the same questions to the psychical researcher that are posed by the prize-winning literature of Patience Worth (see page 406) or Beethoven's 1980 symphony. Is the painting, poetry or music, believed by many to be

Above: the style is unmistakably Aubrey Beardsley's but this pen-and-ink drawing was produced through the hands of English psychic Matthew Manning

Above right: a posthumous Picasso. Matthew Manning remarked on the 'energy and impatience' of the artist. Picasso was one of the few artists who chose to use colour



evidence of the artists' survival beyond the grave, merely an exhibition of the medium's own repressed creativity, finally finding expression? Or is it really as simple as the psychics would have us believe – that the world's great musicians, writers and artists are 'proving' their continued existence by carrying on their arts through selected 'sensitives'?

But some examples of 'automatic' or psychic art are impressive, both in their own right and, more significantly, as examples of the styles of the great painters. Some collections of psychic art are also impressive in their diversity of style and their sheer quantity.

It was Matthew Manning's enormous collection of sketches, paintings and drawings,



Above right: a Manning Monet. The style seems to be consistent with that of the great French Impressionist

Right: when this sketch of a hanged man began to take shape Matthew felt physically ill and wanted to stop the drawing, but his (anonymous) communicator compelled him to finish it



produced psychically by him as a teenager in the early 1970s, that convinced his publisher that he was a very special young man.

Matthew Manning's intelligent, articulate and objective approach to all the strange phenomena in his life makes fascinating reading. In his first book, *The link*, he discusses his method of 'contacting' dead artists. He simply sat quietly with a pad and pen in his hand and concentrated on the artist. He never went into a trance and was always aware of everything going on around him. Almost immediately the pen would begin to move, usually starting in the centre of the page and finally filling the page with what seemed like a well-planned work of art. Almost always the result was recognisably in the style of the artist he had been concentrating on – sometimes it was even signed. Occasionally, although bearing a strong resemblance to the style of the artist he had wanted to 'get through' to, the pictures were not signed. It seemed to Mr Manning that some other discarnate artist, perhaps even a pupil of the greater one, had intervened.

The communicators showed very distinct personalities. 'No other communicator tires me out as much as Picasso does,' said Mr Manning. 'After only a few minutes, the time it takes him to do one drawing, I feel worn out and cannot continue for at least 24 hours . . .' When Picasso first came through in 1973, Matthev Manning says his hand was 'moved with excessive force' and two of his finer pen-nibs were snapped. When the drawing suddenly stopped, completed, and Matthev looked at the picture objectively he could see that it 'was unmistakably in Picasso's style; it was bold and strong.'

Also, Pablo Picasso was one of the few



communicators who was not confused about using colour – he directed Matthew Manning's hand to pick out certain felt-tipped pens from a box of mixed colours. Most of his other discarnate artists used pen-and-ink.

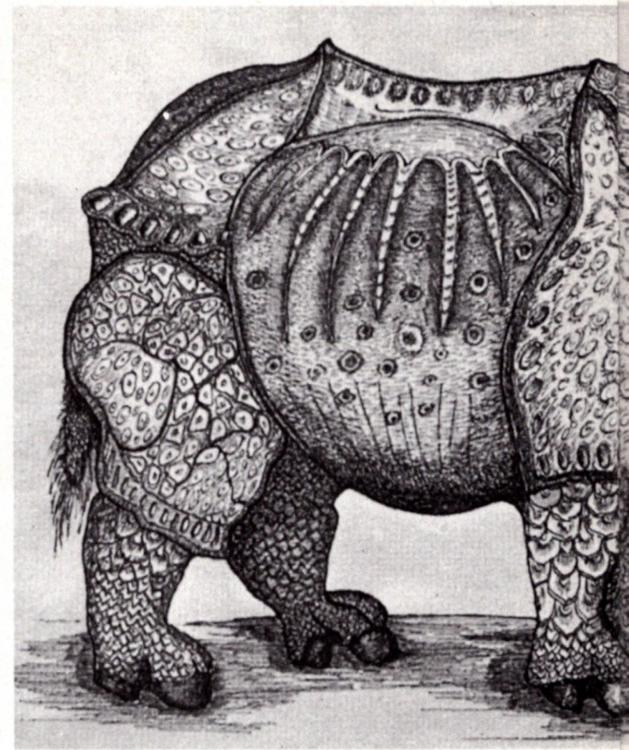
Among the signed works in his collection are drawings recognisably in the styles of Arthur Rackham, Paul Klee, Leonardo da Vinci, Albrecht Dürer, Aubrey Beardsley, Beatrix Potter, Pablo Picasso, Keble Martin and the Elizabethan miniaturist Isaac Oliver.

Sometimes a finished picture would be very similar to a famous work by that particular artist. Matthew Manning often recognised them as 'copies' but occasionally the remarkable similarities had to be pointed out to him. A virtual reproduction of Beardsley's famous *Salome*, for example, took place under his eyes as he concentrated on Beardsley. But what value did these copies have – except to prove perhaps that the artist was alive and his style unchanged? Were they meant, in fact, to establish his identity?

The 'new' work came at an incredible speed. There was no preliminary sketching, nor – except in the case of Aubrey Beardsley

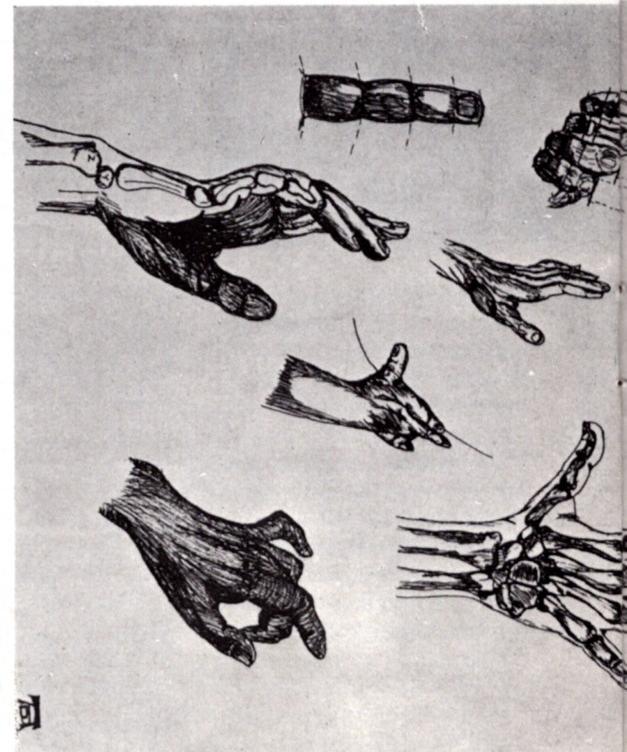
Above: four centuries after his death Isaac Oliver, the Elizabethan miniaturist, executed and signed such detailed – and typical – work via Matthew Manning

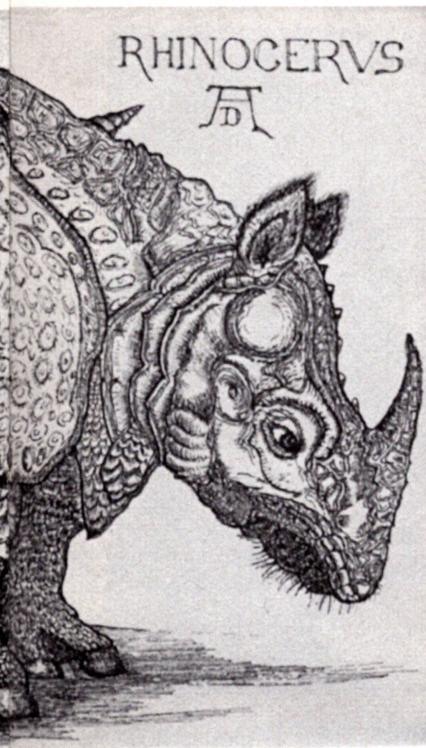
Albrecht Dürer (1471–1528), inventor of engraving and true son of the Renaissance, was another of Matthew Manning's alleged communicators. The rhinoceros (above right) and the study of human hands (right) – 'transmitted through' Matthew Manning – are characteristic of Dürer's minute observation and the scope of his interests



– were any mistakes made and covered over. It took between one and two hours to produce a finished work, whereas most living artists would take perhaps six or eight hours to produce a painting of similar size and complexity – and then not necessarily of the same high quality. More time would also have been spent in planning and sketching.

But one psychic artist has produced new 'old masters' at the rate of 21 in 75 minutes. In March 1978 the Brazilian Luiz Gasparetto appeared on BBC-TV's *Nationwide*





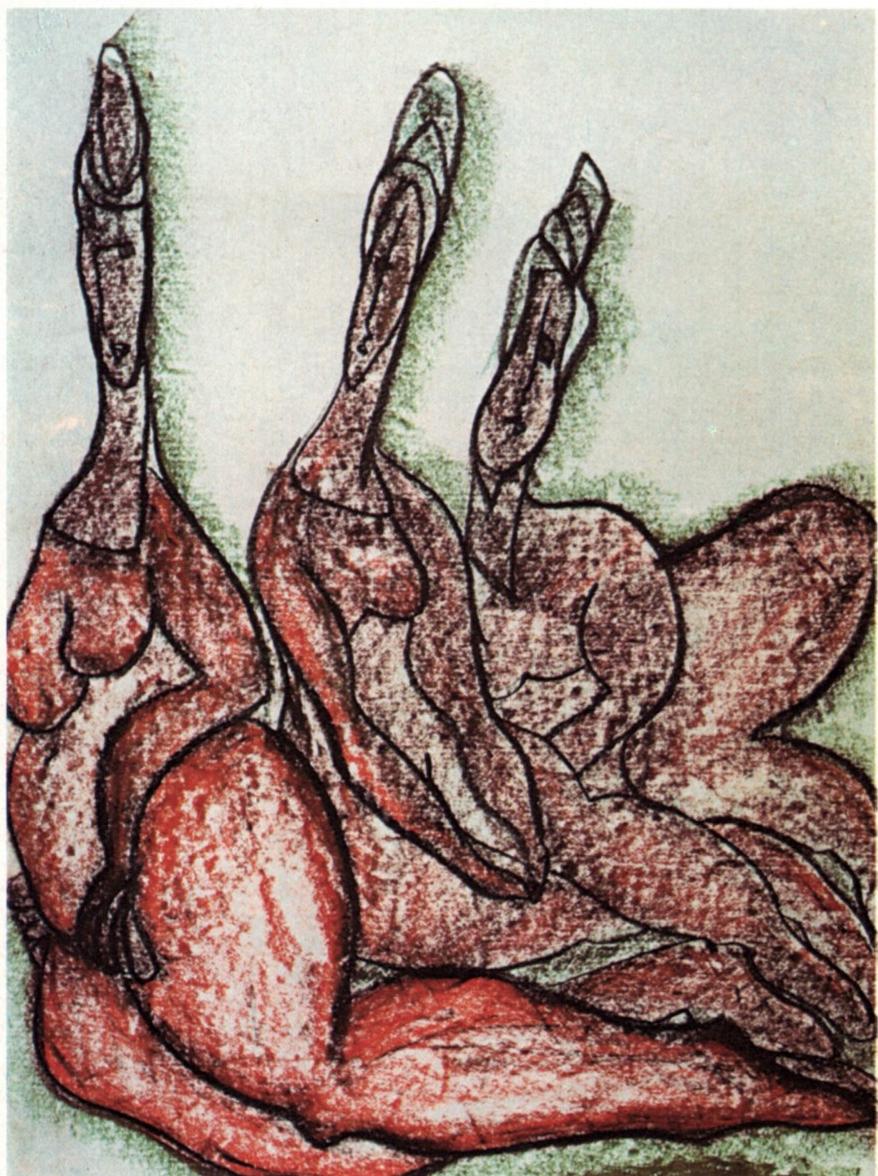
Right: a crayon drawing by Brazilian trance artist Luiz Antonio Gasparetto in the style of Henri de Toulouse-Lautrec (1864-1901). Whereas most of Luiz's paintings take only a few minutes to complete, this one took several hours. The drawing was made in 1978 while the medium was living in London, studying English



Psychic art

Spiritualist medium Coral Polge presented this psychic sketch of 'a little girl' (right) to a sitter. In fact 'she' bears a striking resemblance to Dag Hammarskjöld when young (far right): the sitter was researching for a book about him at the time

Two of Luiz Gasparetto's crayon drawings in distinctly different styles: one very reminiscent of Modigliani's style (below) and a charming study (below right) that is actually signed 'Renoir'

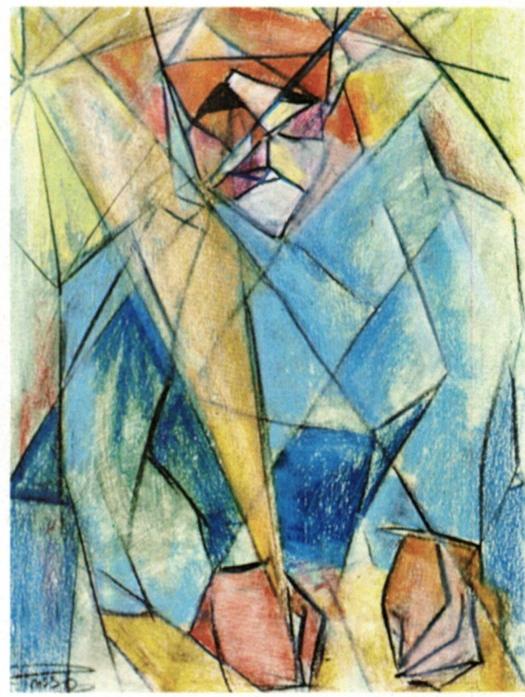
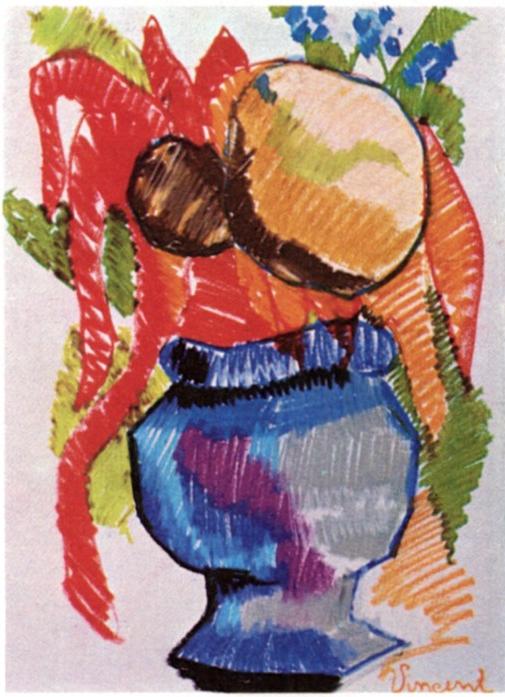


and was seen by millions to go into a trance and produce 21 pictures – sometimes working with both hands simultaneously on two separate pictures, sometimes producing perfect paintings, but executing them upside down – and all so fast that many viewers believed the BBC had accelerated the film. And the results were apparently 'new' Renoirs, Cézannes and Picassos.

Senhor Gasparetto found working under the harsh studio lights very trying, because he normally paints – in a trance – in the dark or, at the most, in a very weak light. As he is also a psychologist by profession, he views what he produces with some objectivity. But, although familiar with others who write or



Sometimes painted with both hands simultaneously, sometimes with his toes and almost always within a few minutes, Luiz Gasparetto's trance-paintings bear striking resemblances to the works of famous, dead artists. Often the 'spirit' paintings are signed, such as this typical Van Gogh (right) – signed 'Vincent' – and this slightly unusual Picasso (far right). Others need no signature; the style is sufficient. Who else could have painted this closely-observed portrait of a *demi-mondaine* (below) but Toulouse-Lautrec?



paint by psychic means, he says: 'I've never seen anyone else who can draw with both hands in the dark – in 30 different styles.' In a state of normal consciousness he says he cannot paint at all.

The Brazilian says he sees, senses and talks to all the great artists who 'come through'. Interestingly, in view of Matthew Manning's experience, Senhor Gasparetto said: 'Picasso sometimes used to be violent. If anyone whispered he would throw the paper away.'

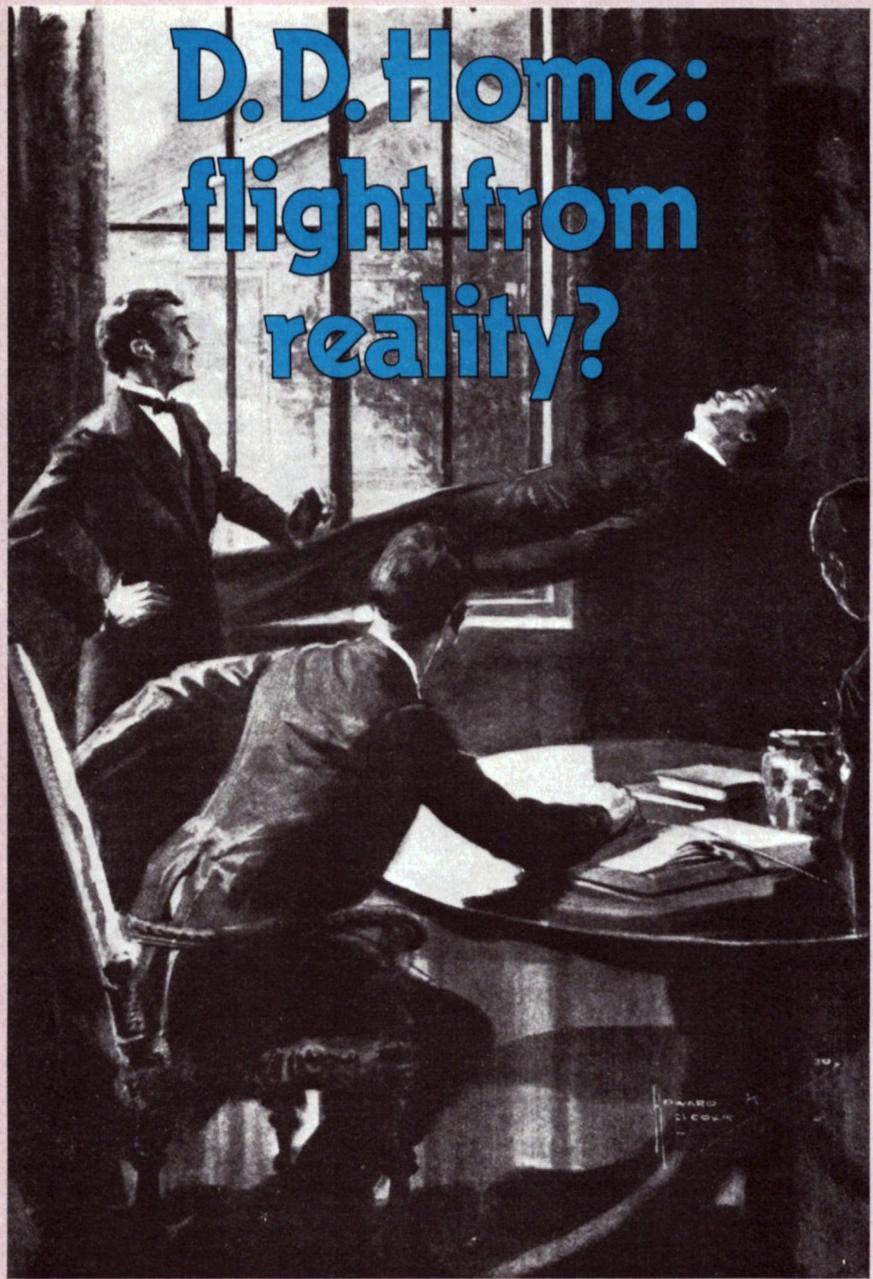
Luiz Gasparetto travels extensively with journalist and fellow Spiritist Elsie Dubugras, giving demonstrations of psychic painting. After each session the paintings are auctioned and the proceeds go to charity.

Although Senhor Gasparetto is still producing vast numbers of psychic paintings, Matthew Manning has done little automatic art or writing since adolescence. At first he did it because he found it quelled the poltergeist activity that seemed always to surround him, but now the power, whatever it is, has been harnessed for healing.

There are some mediums, such as Frank Leah, Coral Polge and Margaret Bevan, who have produced drawings of the spirits who come to comfort the bereaved; in many cases these 'spirit portraits' of loved ones are startling likenesses.

Researchers and sceptics alike have come up with theories of repressed creativity, or even a secondary personality, to account for the strange phenomenon of psychic art. Perhaps we will never know how or why it happens, but out of all the vast array of paranormal phenomena this threatens no one – and often produces works of great beauty.

Can a dead woman dictate poems and novels that win literary acclaim? See page 406



D.D. Home: flight from reality?

The pinnacle of D.D. Home's career came when he was seen to float out of one window and in through another. But, asks LYNN PICKNETT, could this famous incident have been his one act of calculated fraud?

ONE OF THE MOST controversial events in the history of paranormal phenomena involved the most famous Victorian medium, Daniel Dunglas Home, who had never been detected in fraudulent activity during any of his 1500 recorded seances. This particular event, so special yet to many so suspicious, was Home's alleged levitation out of one window – some considerable distance from the ground – and back in through another. There were three witnesses to this bizarre incident: Lord Adare, his cousin Captain Charles Wynne, and the Master of Lindsay – all prominent and reputable members of London society. Yet the curious thing is that

Above: an artist's impression of Home levitating. Although his psychic talents included incombustibility, bodily elongation and the manifestation of apports, he was primarily famous for his spectacular levitations

those are the only details about this event that are known with any certainty. The classic – some would say credulous – account is given on page 330. The results of more penetrating and objective modern research are given space here.

On 13 December 1868 those three gentlemen met for a seance with Home in an apartment in the central London area. Even their accounts of where the incident took place differed. Lord Adare said 5 Buckingham Gate, Kensington; he also said in another account that it took place at Ashley Place, Westminster. Lindsay, however, favoured Victoria Street, Westminster.

Author, sceptic and debunker of the paranormal John Sladek lists other discrepancies among the witnesses' various statements in his book *The New Apocrypha*:

There was a ledge 4 inches [10 centimetres] wide below the windows (Adare); a ledge $1\frac{1}{2}$ inches [4 centimetres] wide (Lindsay); no foothold at all (Lindsay); balconies 7 feet [2 metres] apart (Adare); no balconies at all (Lindsay). The windows were 85 feet [25 metres] from the street (Lindsay); 70 feet [21 metres] (Lindsay); 80 feet [24 metres] (Home); on the third floor (Adare); on the first floor (Adare). It was dark (Adare); there was bright moonlight (Lindsay). Home was asleep in one room and the witnesses went into the next (Adare); Home left the witnesses in one room and went himself into the next (Adare).

In the footsteps of D.D. Home

Significantly, Captain Wynne's only recorded statement on the matter simply says: 'Home went out of one window and came in at another.' The word 'levitation' is conspicuous by its absence.

However, discrediting the witnesses by quoting the discrepancies in their statements does not necessarily imply the incident never took place. Nor have the conflicting addresses given proved too much of an obstacle in tracing the scene of the phenomenon. Archie Jarman, in his meticulously researched article published in *Alpha* magazine in October 1980, described how he managed to track down the house in question, using as his first reference one letter – written to Sir Francis Burnand by Lord Adare.

In this letter Adare states that the event took place at Ashley House, but gave it the wrong address, saying it was in Victoria Street. Archie Jarman noted:

The two rooms at Ashley House were connected by folding doors . . . The sash-windows opened onto stone balconies about 15 inches [38 centimetres] wide and running the width of the windows. Lord Lindsay later recorded that the balconies were 7 feet 5 inches [2 metres 13 centimetres] apart and it was this gap that Home was supposed

to have crossed by means of levitation. An important clue given by Adare was that there was a 6-inch [15-centimetre] recess in the main wall of the building between the windows.

Jarman walked the length of Victoria Street hoping to find a faded inscription on one of the older buildings that would reveal the real 'Ashley House', but he found nothing helpful and no one who knew of its existence. But he did find an 'Ashley Place' close to the precincts of Westminster Cathedral and one of its few remaining older buildings looked promising. This was 1-10 Ashley Place. The caretaker told Jarman of the building's chequered history since its construction in 1845; of the minor repairs carried out after a bomb had exploded close to it in 1944, and that the suites - residential in Home's time - were now offices. But more significant was the fact that it used to be called 'Ashley House' before the GPO changed it to 'Ashley Place' in 1930 for some reason of their own.

Teetering on the ledge

As Jarman says, 'seeing as Home had been flying high' he took the lift to the top floor, now occupied by a firm of architects. Rather surprisingly, perhaps, Mr Perry, one of the executives of the firm, did not think Mr Jarman a crank in his search for the suite where D. D. Home 'flew'. Indeed, he was most helpful. He showed Jarman that two of his rooms were, in fact, connected by folding doors as described in Adare's account.

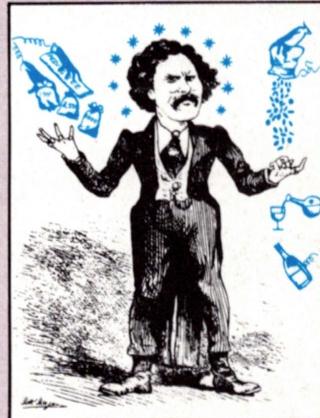
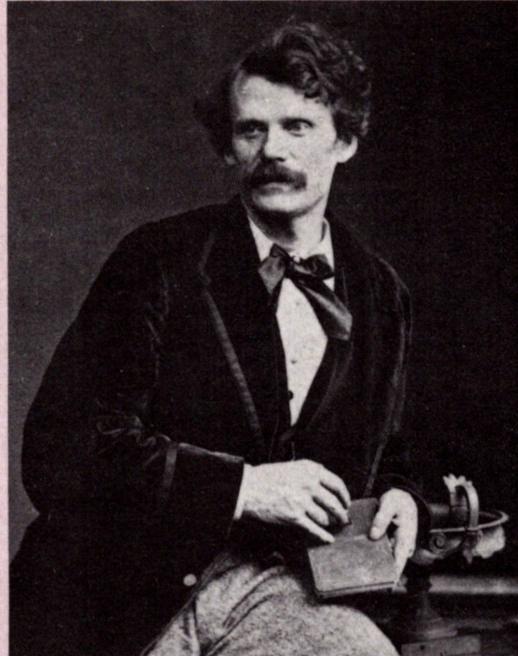
Mr Perry and Archie Jarman measured the distance between the balconies - 7 feet 5 inches (2 metres 13 centimetres), confirming Lindsay's description and the 6-inch (15-centimetre) recess mentioned by Adare was also present. The drop to the ground was 45 feet (13.5 metres) - not quite the 80 feet (24 metres) claimed by Home, but still a long way to fall.

Jarman noticed an architectural feature not mentioned in any of the witnesses' accounts - a flat cornice, or ledge, about 5 inches (13 centimetres) wide, ran just below the balconies. Perhaps, after all, the irreproachable Home had edged his way along this narrow foothold from window to window, simply fulfilling Captain Wynne's baldly descriptive statement.

However, Mr Jarman was nothing if not courageous. With some help from the caretaker, and taking sensible precautions, he tried to make his own way along the ledge but soon gave up. It was impossible to cross between the balconies on that ledge.

Another explanation that occurred to Archie Jarman was that Home had perhaps walked a tightrope between the balconies, having previously strung a rope or cord between them and attached it to the old-fashioned pivot-bolt of the blinds, which would have protruded beyond the windows. Intrepidly, Jarman proposed to try this death-defying feat himself but the landlords

Right: Daniel Dunglas Home (1833-1886) was undoubtedly the most famous medium of all time. He claimed to be the love-child of a Scottish peer but was brought up modestly in the United States by an aunt



Above: Home was often the butt of cartoonists. His spectacular feats brought him wealth and fame; but critics accused him of being a fraud and a gold-digger and his close friendship with Lord Adare was whispered to be 'unnatural'. The press made the most of Home's legal adoption by a rich old lady, and the fact that he fled from her when her attentions became more than motherly

Further reading
 T. H. Hall, *New light on old ghosts*, Duckworth 1965
 D. H. Rawcliffe, *Illusions and delusions of the supernatural*, Dover Publications (New York) 1959
 John Sladek, *The New Apocrypha*, Granada Publishing 1978

refused to sanction such a dangerous 'reconstruction'. However, it seems likely that Home could have faked his *pièce de résistance* by some artificial means such as tightrope-walking, or even swinging, Tarzan-like, between balconies.

Jarman's suspicions had been aroused by two unusual conditions surrounding the 'levitation' on the evening of 13 December 1868. One was Home's insistence that he would 'levitate' out of a specific window and back in through another. Yet this was the very medium who often remarked that he had no control over the 'spirits' who, he believed, raised him up. So why put them to the test with 45 feet (13.5 metres) of thin air and a stony pavement beneath him?

Jarman draws our attention to a second suspicious factor. Before his exit from the window Home made the three witnesses promise not to move from their chairs until he re-emerged. When he reappeared he thanked them for their co-operation in this matter. But if they had rushed to the window what would they have seen, what would their presence have ruined? The powers of the spirits? Home's concentration as he walked the tightrope or swung from balcony to balcony? Home's entire reputation once and for all? We shall never know, for like the noble English gentlemen they were, they kept their promise and remained seated, well away from the window. They saw him go out of one window and come in through another. That is all they saw.

And yet hundreds of people had witnessed Home levitate in drawing rooms in America and all over Europe. There was no doubt in their minds that the levitations they witnessed were totally genuine, inexplicable phenomena. It would be very sad if Home's only deliberate cheating was on the occasion of his most famous 'triumph'.

THOMAS ALVA EDISON was one of the greatest practical scientists of the 19th century. His achievements included the perfection of the 'duplex' telegraph, the invention of the phonograph and the introduction into the United States of the first electric light. In 1882 his generating station brought electric street lighting to New York for the first time, and 12 years later his moving picture show, which he called his 'kinetoscope parlour', was opened in the city.

Despite these solid successes, however, an interview he gave to the *Scientific American* in 1920 caused concern among his contemporaries, some of whom must have thought that the 73-year-old inventor had lapsed into senility. What he proposed, in the issue of 30 October, was no less than an instrument for communicating with the dead:

If our personality survives, then it is strictly logical and scientific to assume that it retains memory, intellect and other faculties and knowledge that we acquire on this earth. Therefore if personality exists after what we call death, it is reasonable to conclude that those who leave this earth would like to communicate with those they have left here... I am inclined to believe that our personality hereafter will be able to affect matter. If this reasoning be correct, then, if we can evolve an instrument so delicate as to be affected, or moved, or manipulated... by our personality as it survives in the next life, such an instrument, when made available, ought to record something.

Edison worked on the development of such an instrument, but was unsuccessful. However in the opinion of many modern scientific researchers, his views were apparently vindicated in the summer of 1959.

At that time a celebrated Swedish painter, musician and film producer named Friedrich Jürgenson took his battery operated tape recorder out into a remote part of the countryside near his villa in order to record bird-song. Playing the tapes back later, Jürgenson found not only bird sounds but faint human voices, speaking in Swedish and Norwegian and discussing nocturnal birdsong. Despite the 'coincidence' of subject matter, Jürgenson first thought that he had picked up a stray radio transmission. On repeating the experiment, however, he heard further voices, this time addressing him personally and claiming to be dead relatives and friends of his. Over the next few years, working from his home at Mölnbo, near Stockholm, Jürgenson amassed the evidence that he was to present in his book *Voice from the Universe* in 1964. This proved sufficiently convincing to attract the attention of the eminent German psychologist Professor Hans Bender, director of the Government-funded parapsychological research unit at the University of Freiburg, who in turn set up a team of distinguished

The ghosts in the machine

Has the modern tape recorder provided evidence of survival after death? Thousands of voices – purporting to be those of the dead – have been recorded and there is no rational explanation for their origin. What are we to make of them? FRANK SMYTH investigates



scientists to repeat the experiments and analyse the results.

Their findings can be summarised as follows: that under differing conditions and circumstances a factory-clean tape, run through an ordinary tape-recording head in an otherwise silent environment, will contain human voices speaking recognisable words when played back; that the origin of these voices is apparently inexplicable in the light of present day science; and that the voices themselves are objective in that they yield prints in the same way as normal voices, and register as visible oscilloscope impulses on videotape recordings.

The implications of these 'voices from nowhere' are enormous. Dr Bender himself is reported to consider them of more importance to humanity than nuclear physics;

Above: Thomas Alva Edison (1847-1931), inventor of the phonograph and the electric light bulb. In 1920 he worked on the development of a device that would, he believed, make possible a form of telepathic contact with the dead

An ordinary cassette tape recorder can be used to record 'electronic voices' but, generally speaking, the better the equipment, the more satisfactory the results. Machines with volume, tone and level controls make the task of deciphering the voices on playback much easier, and a good set of headphones is essential.

Experts agree that the hours between sunset and sunrise are the best time for experiments. Most researchers prefer to work in a quiet room, although a portable tape recorder in a quiet place in the countryside can yield good results, as Jürgenson proved.

Raudive recommended that the date and time should be spoken into the microphone before each session, followed by an invitation to the voices to speak. Each recording session should be no longer than two minutes, as intense concentration is needed in listening to the

Recording the voices yourself

playback of the voices.

Three basic recording methods are most likely to be of use. With the first, the tape recorder is simply switched to 'record', then questions are asked aloud and noted on paper.

With the second method, preliminary announcements are made through a microphone which is then unplugged and a radio attached to the recorder instead. The radio is tuned between frequencies, to a band of 'white noise', and the recording level is set mid-way between maximum and minimum.

The third method involves the use of a diode receiver, a small crystal set that is plugged into the microphone socket of the tape recorder. The recording level is set at maximum. According to Raudive, diode recording gives the best results, the voices being slower, clearer and more natural.

Right: Friedrich Jürgenson (seated), the discoverer of the voice phenomenon, with Professor Hans Bender. Together with a team of scientists, Professor Bender studied the voices received by Jürgenson and conducted exhaustive experiments with his own recordings



at the very least, he concluded in a paper for *Parapsychology Review*, the 'paranormal origin of the phenomena is highly probable.'

Other scientists besides Dr Bender were to become fascinated by Jürgenson's odd discovery. Dr Konstantin Raudive, former professor of psychology at the Universities of Uppsala and Riga, was living in Bad Krozingen, Germany, when he heard of the Jürgenson-Bender experiments in 1965. A former student of Carl Jung, Dr Raudive had been forced to flee from his native Latvia when it was invaded and annexed by the Soviet Union in 1945. Since then he had become well known as a writer on experimental psychology.

Dr Raudive too, began recording tests on the mysterious voices with conspicuous success, and between 1965 and his death in 1974,

in partnership with physicist Dr Alex Schneider of St Gallen, Switzerland, and Theodor Rudolph, a specialist in high frequency electronic engineering, he made over 100,000 tapes under stringent laboratory conditions. An exhaustive analysis of his work was published in Germany in the late 1960s under the title *The inaudible made audible*; this caught the attention of British publisher Colin Smythe, who later brought out an English language edition entitled *Breakthrough*.

Peter Bender, who wrote the preface to the book, later gave an account of how he first heard a strange voice on tape; this nicely illustrates 'what happens' as a rule, and also points out the objective nature of the phenomenon. Colin Smythe had bought a new tape and had followed Dr Raudive's instructions

Electronic voice phenomena

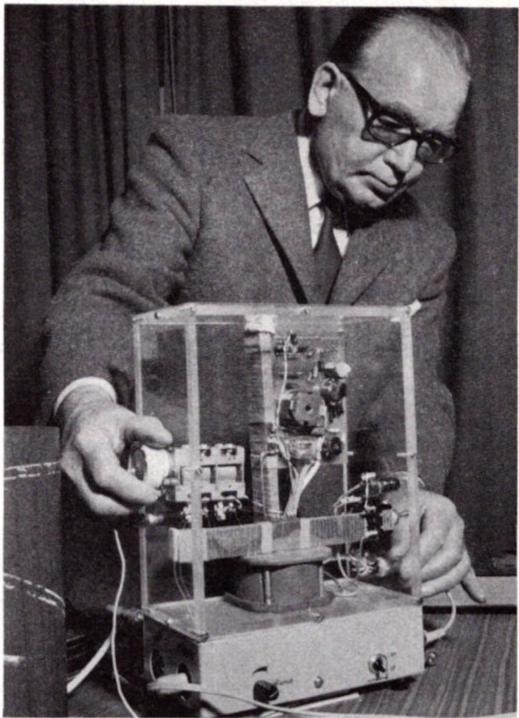
on how to 'contact' the voices. A certain rhythm resembling a human voice had been recorded, but it was unintelligible to Mr Smythe. Peter Bander played the relevant portion of tape over two or three times, and suddenly became aware of what the voice was saying. It was a woman's, and it said 'Mach die Tür mal auf' - German for 'Open the door'. Mr Bander immediately recognised the voice as that of his dead mother - he had been in the habit of conducting his correspondence with her by tape recording for several years before she died. And the comment was apt: his colleagues often chided him for being unsociable by shutting his office door.

Startled, Mr Bander asked two people who did not speak German to listen to the tape and write down what they heard phonetically. Their versions matched what he had heard exactly: Peter Bander was convinced of the authenticity of the voices.

Since the publication of *Breakthrough* in 1971 serious research has begun in all parts of the world. The interest of two very different bodies reflects the spiritual and temporal

Right: Dr Konstantin Raudive with the 'goniometer', an instrument that was designed for him by Theodor Rudolph of Telefunken to record 'spirit' voices

Below: the Right Reverend Monsignor Stephen O'Connor (right), Vicar General and Principal Roman Catholic Chaplain to the Royal Navy, listening to a voice recorded by Dr Raudive (left). The voice seemed to be that of a young naval officer who had committed suicide two years earlier



Right: Pope Paul VI who, in 1969, decorated Friedrich Jürgenson with the Commander's Cross of the Order of St Gregory the Great. The Catholic Church has never expressed an official opinion on the nature of the mysterious voices, but Jürgenson has said that he found 'a sympathetic ear' for the phenomenon in the Vatican



aspects of the voices. The Vatican has shown a great deal of 'off the record' awareness of the phenomena, and a number of distinguished Catholic priest-scientists have conducted experiments of their own. Pre-eminent among the first of these researchers was the late Professor Gebhard Frei, an internationally recognised expert in the fields of depth psychology, parapsychology and anthropology. Dr Frei was the cousin of the late Pope Paul VI, the pontiff who, in 1969, decorated Friedrich Jürgenson with the Commander's Cross of the Order of St Gregory the Great, ostensibly for documentary film work about the Vatican. But Jürgenson told Peter Bander in August 1971 that he had found 'a sympathetic ear for the voice phenomenon in the Vatican'.

The interest of the National Aeronautics and Space Administration (NASA) came to light in the late 1960s when two American engineers from Cape Kennedy visited Dr Raudive at Bad Krozingen. The visitors examined Dr Raudive's experiments minutely, and asked many 'unusually pertinent questions' as well as making helpful comments. They refused, unfortunately, to give the scientist any indication of what relevance the voice phenomena might have to America's space programme. But as Dr Raudive reasoned: if he could achieve clear and regular results on his relatively simple equipment, how much more likely was it that the sophisticated recorders carried in space craft should pick up the voices? From whatever source they spring, Jürgenson's voices from the Universe represent a whole new field in the study of the paranormal.

What is the nature of the voices? Are they truly those of the dead? See page 418

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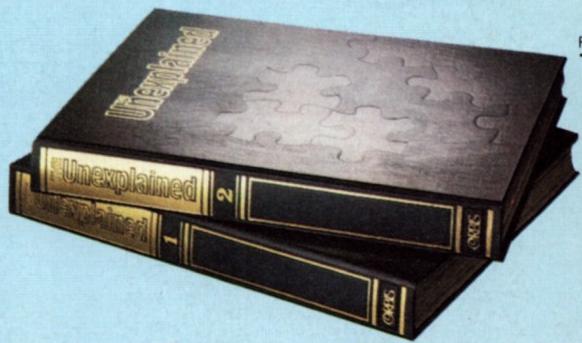
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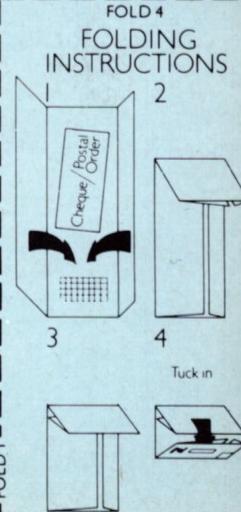
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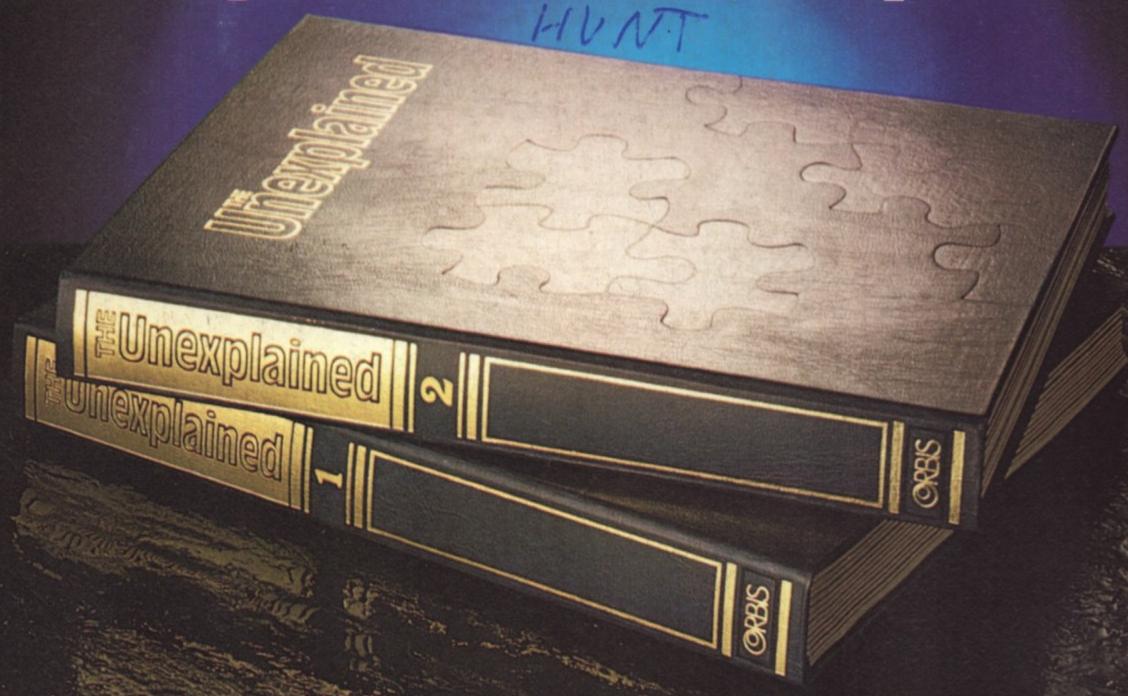
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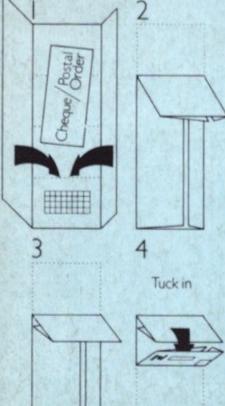


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